IN THE CLAIMS

For the convenience of the Examiner, all claims have been presented whether or not an amendment has been made.

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1. (Withdrawn) A method for providing instructions to a switch, comprising:

generating a count value including a first portion and a second portion, the second portion operable to identify a relative location in one of a plurality of instruction sets in an instruction memory for a switch;

determining a redirection value for the first portion of the count value based on the first portion of the count value, the redirection value identifying an instruction set in the instruction memory; and

reading an instruction from the relative location in the instruction set based on the redirection value and the second portion of the count value.

2. (Withdrawn) The method of Claim 1, wherein the first portion of the count value identifies an initial instruction set disparate from the instruction set.

3. (Withdrawn) The method of Claim 1, wherein the count value is a unitary value and the first portion comprises a set of most significant bits (MSB) of the unitary value and the second portion comprises a set of least significant bits (LSB) of the unitary value.

4.   (Withdrawn) The method of Claim 1, further comprising:

incrementing the count value from an initial value to a final value representing a total number of instructions in the instruction memory, each count value including the first portion and the second portion, the second portion identifying a relative location in one of the instruction sets;

for each count value, determining a redirection value based on the first portion of the count value, the redirection value identifying an instruction set in the instruction memory; and

reading an instruction from the relative location in the instruction set based on the redirection value and the second portion of the count value.

5.   (Withdrawn) The method of Claim 1, wherein the switch is a synchronous switch.

6.   (Withdrawn) The method of Claim 5, wherein the synchronous switch is a time slot interchanger (TSI).

7.   (Withdrawn) A system for providing instructions to a switch, comprising:

a computer-readable medium; and

software stored on the computer-readable medium, the software operable to generate a count value including a first portion and a second portion, the second portion operable to identify a relative location in one of a plurality of instruction sets in an instruction memory for a switch, to determine a redirection value for the first portion of the count value based on the first portion of the count value, the redirection value operable to identify an instruction set in the instruction memory, and to read an instruction from the relative location in the instruction set based on the redirection value and the second portion of the count value.

8.   (Withdrawn) The system of Claim 7, wherein the first portion the count value identifies an initial instruction set disparate from the instruction set.

9.   (Withdrawn) The system of Claim 7, wherein the count value is a unitary value and the first portion comprises a set of most significant bits (MSB) of the unitary value and the second portion comprises a set of least significant bits (LSB) of the unitary value.

10.   (Withdrawn)   The system of Claim 7, the software further operable to increment the count value during a cycle of the synchronous switch from an initial value to a final value representing a total number of instructions in the instruction memory, each count value including the first portion and the second portion, the second portion identifying a relative location in one of the instruction sets, to determine for each count value a redirection value based on the first portion of the count value, the redirection value identifying an instruction set in the instruction memory, and to read for each count value an instruction from the relative location in the instruction set based on the redirection value and the second portion of the count value.

11.   (Withdrawn) The system of Claim 7, wherein the switch is a synchronous.

12.   (Withdrawn) The system of Claim 11, wherein the synchronous switch is a time slot interchanger (TSI).

13.   (Original) A method for associating routing parameters for a switch with line cards serviced by the switch, comprising:

programming a redirection memory to associate a routing parameter set in a routing memory for a switch with a first line card, the routing parameter set including a plurality of routing parameters to be provided to the switch to service the first line card; and

in response to an event initiating activation of a second line card in place of the first line card, reprogramming the redirection memory to associate the routing parameter set in the routing memory with the second line card.

14.   (Original) The method of Claim 13, wherein the event is a failure of the first line card.

15.   (Currently amended) The method of Claim 13, further comprising:

programming the redirection memory to associate a second routing parameter set in the routing memory with the second line card, the second routing parameter set including a plurality of routing parameters to be provided to the switch to service the second line card; and

in response to the event initiating activation of the second line card in place of the first line card, reprogramming the redirection memory to associate the second routing parameter set with the first line card.

16.   (Original) The method of Claim 13, wherein the routing parameters comprise instructions, the routing parameter set comprises an instruction set and the routing memory comprises an instruction memory.

17.   (Original)   The method of Claim 16, wherein the switch comprises a synchronous switch.

18.   (Original) The method of Claim 17, wherein the synchronous switch is a time slot interchanger (TSI).

19.   (Original)   The method of Claim 13, wherein the redirection memory comprises a programmable table storing associations between line cards serviced by the switch and the routing parameter sets in the routing memory for the switch.

20.   (Original) A system for associating router parameters for a switch with line cards serviced by the switch, comprising:

a computer-readable medium; and

software stored on the computer-readable medium, the software operable to initially associate a router parameter set in a router memory for a switch with a first line card, the router parameter set including a plurality of routing parameters to be provided to the switch to service the first line card, and, in response to an event initiating activation of a second line card in place of the first line card, to reassociate the router parameter set with a second line card.

21.   (Original) The system of Claim 20, wherein the event comprises failure of the first line card.

22.   (Currently amended) The system of Claim 20, the software further operable to initially associate a second router parameter set in the router memory with the second line card, the second router parameter set including a plurality of router parameters to be provided to the switch to service the second line card, and, in response to the event, to reassociate the second router parameter set with the first line card.

23.   (Original) The system of Claim 20, wherein the routing parameters comprise instructions, the routing parameter set comprises an instruction set and the routing memory comprises an instruction memory.

24.   (Original)   The system of Claim 23, wherein the switch comprises a synchronous switch.

25.   (Original) The system of Claim 24, wherein the synchronous switch is a time slot interchanger (TSI).

26. (Original) A synchronous switch for a telecommunications node, comprising:

a time slot interchanger (TSI) operable to switch traffic between time slots for a plurality of line cards;

an instruction memory for the TSI, the instruction memory comprising a plurality of instruction sets, each instruction set including a plurality of instructions operable to be provided to the TSI to switch time slots of an associated line card;

a redirection memory operable to selectively associate each instruction set of the instruction memory with a disparate one of the line cards; and

a controller operable to reprogram the redirection memory to change associations of the instruction sets with the line cards.

27. (Original) The synchronous switch of Claim 26 further comprising:

the redirection memory programmed to associate a first instruction set with a working line card and a second instruction set with a protect line card; and

the controller operable to reprogram the redirection memory to associate the first instruction set with the protect line card and the second instruction set with the working line card in response to failure of the first line card and activation of the second line card in place of the first line card.

28.   (Original) A system for associating routing parameters for a switch with line cards serviced by the switch, comprising:

means for programming a redirection memory to associate a routing parameter set in a routing memory for a switch with a first line card, the routing parameter set including a plurality of parameters to be provided to the switch to service the first line card; and

means for reprogramming the redirection memory to associate the routing parameter set in the routing memory with the second line card in response to an event initiating activation of a second line card in place of the first line card.

29.   (Original) The system of Claim 28, wherein the event is a failure of a first line card.

30.   (Original) The system of Claim 28, further comprising:

means for programming the redirection memory to associate a second routing parameter set in the routing memory with the second line card, the second routing parameter set including a plurality of routing parameters to be provided to the switch to service the second line card; and

means for reprogramming the redirection memory to associate the second routing parameter set with the first line card in response to the event initiating activation of the second line card in place of the first line card.

31.   (New) Logic for associating routing parameters for a switch with line cards serviced by the switch, the logic encoded in media and operable when executed to perform the steps of:

programming a redirection memory to associate a routing parameter set in a routing memory for a switch with a first line card, the routing parameter set including a plurality of routing parameters to be provided to the switch to service the first line card; and

in response to an event initiating activation of a second line card in place of the first line card, reprogramming the redirection memory to associate the routing parameter set in the routing memory with the second line card.

32.   (New) The logic of Claim 31, wherein the event is a failure of the first line card.

33.   (New) The logic of Claim 31, further operable when executed to perform the steps of:

programming the redirection memory to associate a second routing parameter set in the routing memory with the second line card, the second routing parameter set including a plurality of routing parameters to be provided to the switch to service the second line card; and

in response to the event initiating activation of the second line card in place of the first line card, reprogramming the redirection memory to associate the second routing parameter set with the first line card.

34.   (New) The logic of Claim 31, wherein the routing parameters comprise instructions, the routing parameter set comprises an instruction set and the routing memory comprises an instruction memory.

35.   (New) The logic of Claim 34, wherein the switch comprises a synchronous switch.

36.   (New) The logic of Claim 35, wherein the synchronous switch is a time slot interchanger (TSI).

37.   (New) The logic of Claim 31, wherein the redirection memory comprises a programmable table storing associations between line cards serviced by the switch and the routing parameter sets in the routing memory for the switch.

38.   (New) A method for associating routing parameters for a switch with line cards serviced by the switch, comprising:

programming a redirection memory to associate a routing parameter set in a routing memory for a switch with a first line card, the routing parameter set including a plurality of routing parameters to be provided to the switch to service the first line card;

in response to an event initiating activation of a second line card in place of the first line card, reprogramming the redirection memory to associate the routing parameter set in the routing memory with the second line card;

programming the redirection memory to associate a second routing parameter set in the routing memory with the second line card, the second routing parameter set including a plurality of routing parameters to be provided to the switch to service the second line card; and

in response to the event initiating activation of the second line card in place of the first line card, reprogramming the redirection memory to associate the second routing parameter set with the first line card;

wherein the event is a failure of the first line card, the routing parameters comprise instructions, the routing parameter set comprises an instruction set, the routing memory comprises an instruction memory, the switch comprises a synchronous switch, the synchronous switch is a time slot interchanger (TSI), and the redirection memory comprises a programmable table storing associations between line cards serviced by the switch and the routing parameter sets in the routing memory for the switch.